

Appl. No. 09/932,984

REMARKS

Claims 1-4 are pending in this application. Claim 3 has been cancelled without prejudice or disclaimer of the subject matter contained therein. The subject matter of claim 3, which was directed to a preferred embodiment of the invention, has now been incorporated into claim 1 as a limit of 300 to 500 Mpa., thus limiting the value of the flexural modulus to a preferred range, as supported in the specification at page 5, lines 20-22.

DRAWING REQUEST

The Examiner has requested a drawing to illustrate the invention. We have prepared a rough drawing of a two-piece golf ball with a solid core and a cover. We request that the Examiner review the attached formal drawing and, if the examiner finds it to be satisfactory, to approve it.

REJECTION OF CLAIMS UNDER 35 USC § 102(b)

Applicant respectfully traverses the rejection of claims 1, 3 and 4 have under 35 U.S.C. § 102(b) based upon the Japanese Patent to Yoshimasa et al., JP 06-327791 (JP '791). JP '791 provides very little information in English regarding the subject of the Japanese patent. However, the compression of the core is less than the range, which is claimed in claim 2 of the present application. JP '791 discloses a golf ball with a core whose

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compression is 2.6 to 4 mm. Claim 2 of the present application defines a core for the golf ball of the invention with a deformation amount of 4.1 to 5.5 mm when using an initial load of 98 N to a final load of 1275 N. Of course, the compression figures in JP '791 are not fully characterized because the initial load and final load is not specified. The ball compression of 70 to 95 under the PGA system is apparently within the range of 50 to 125 according to claim 1 of the present application. In order to have a golf ball that floats, the specific gravity must be less than 1 and that is not a point of distinction over the Japanese patent publication.

Applicant respectfully traverses the rejection of claim 2 under 35 U.S.C. § 103(a) over the combination of JP '791 and Yamagishi '413 (USP 5,695,413). Yamagishi '413 discloses a core deformation value of 3.5 to 5 mm under a load of 100 kg which appears to overlap with the core deformation of 4.1 to 5.5 mm with the initial load and final load as defined in claim 2. Yamagishi '413 does not appear to mention specific gravity properties as required by JP '791. Further, in the following argument, it is urged that the present invention as now claimed is neither lacking in novelty nor obvious over the cited references, either alone or in combination.

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Table A

Present Invention (Claim 1)	Yoshimasa Reference
Two-piece golf ball composed of a core and a cover	Two-piece golf ball comprised of a core and a cover.
Cover having flexural modulus (F) of 300 to 500 Mpa	Cover mainly contains ionomer resin and has a flexural modulus of 1500 to 300 kg/cm ² (147 to 294 Mpas)
Golf ball having specific gravity of 0.50 to 1.0	Golf ball having specific gravity of 0.50 to 1.0

As is apparent from the above Table A, amended claim 1 of the present invention is not described or taught in the Yoshimasa reference. However, one can see that the flexural modulus of the cover described in the Yoshimasa reference has a range of 147 to 294, which is not within the preferred range of amended claim 1. (i.e., 300 to 500 Mpa). Accordingly, amended claim 1 (a combination of claim 3 and claim 1) overcomes the anticipation rejection over the Yoshimasa reference.

In addition, the present invention is not obvious over the Yoshimasa reference. Please see Comparative Example 2 in Table 3 of the present specification at page 26. Comparative Example 2 has a specific gravity of 0.953, a ball compression of 3.0 and a F/D ratio of 103, which are all within the Yoshimasa range. The flexural modulus of the cover of Comparative Example 2 is 310, which is not within the range of the Yoshimasa reference, and is outside the range of the presently claimed invention. The resulting golf ball of Yoshimasa has poor shot feel despite its longer flight

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distance. This proves the superiority of the golf ball of the present invention over the Yoshimasa reference.

The rejection of claims 1-4 for double-patenting is respectfully traversed, since it appears that both the present application and the co-pending application No. 09/854,693 are pending and there are no issued patents corresponding to such applications, it may be premature to deal with the double-patenting rejection by filing a terminal disclaimer in the present application. Also, the flexural modulus of 200 to 600 Mpa is no longer being claimed in the present application, whereas the flexural modulus is from 80 to 300 Mpa, which is substantially outside the range of the presently claimed invention.

In view of the foregoing remarks and amendments, reconsideration of all claims in the present application is respectfully solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contacting Applicant's representative Edward H. Valance (Reg. No. 19,869) at the telephone number below.

Attached hereto is a marked-up version of the changes made to the application by this Amendment.

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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachment: Version with Markings to Show Changes Made
and Formal Drawing (sheet 1 of 1)

(Rev. 02/20/02)

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A new title and corresponding paragraph are inserted before the first paragraph on page 7, line 5, to describe a newly submitted drawing, as follows:

BRIEF DESCRIPTION OF THE DRAWING

The figure illustrates the two-piece golf ball showing a cross section thereof having a cover (1) and a core (2).

IN THE CLAIMS:

The claims have been amended as follows:

1. (Amended) A light weight golf ball comprising a core and a cover covering the core, wherein

the cover has a flexural modulus (F) of [200 to 600] 300 to 500 MPa,

the golf ball has a specific gravity of not less than 0.50 and less than 1.00, and a deformation amount (D) of 3.1 to 5.0 mm when applying from an initial load of 98 N to a final load of 1275 N, and

a ratio (F/D) of the flexural modulus of the cover (F) to the deformation amount of the golf ball (D) is within the range of more than 50 and not more than 125.